

Dairy Farmer-II

(Job Role)

Qualification Pack: Ref. Id. Agr/Q4101
Sector: Agriculture

Textbook for Class XII



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FOREWORD

The National Curriculum Framework (NCF)-2005 recommends bringing work and education into the domain of the curricular, infusing it in all areas of learning while giving it an identity of its own at relevant stages. It explains that work transforms knowledge into experience and generates important personal and social values, such as self-reliance, creativity and cooperation. Through work, one learns to find one's place in society. It is an educational activity with an inherent potential for inclusion. Therefore, an experience of involvement in productive work in an educational setting will make one appreciate the worth of social life and what is valued and appreciated in the society. Work involves interaction with material or other people (mostly both), thus, creating a deeper comprehension and increased practical knowledge of natural substances and social relationships.

Through work and education, school knowledge can be easily linked to learners' life outside the school. This also makes a departure from the legacy of bookish learning and bridges the gap between school, home, community and workplace. The NCF-2005 also emphasises on Vocational Education and Training (VET) for all those children, who wish to acquire additional skills and/or seek livelihood through vocational education after either discontinuing or completing their school education. VET is expected to provide a 'preferred and dignified' choice rather than a terminal or 'last resort' option.

As a follow-up of this, the NCERT has attempted to infuse work across the subject areas and also contributed in the development of the National Skill Qualification Framework (NSQF) for the country, which was notified on 27 December 2013. It is a quality assurance framework that organises all qualifications according to levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning. The NSQF sets common principles and guidelines for a nationally recognised qualification system, covering schools, vocational education and training institutions, technical education institutions, colleges and universities.

It is under this backdrop that Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent of NCERT, has developed learning outcomes based modular curricula for vocational subjects from Classes IX to XII. This has been developed under the Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education of the Ministry of Human Resource Development.

This textbook has been developed as per the learning outcomes based curriculum, keeping in view the National Occupational Standards (NOSs) for the job role and to promote experiential learning related to the vocation. This will enable the students to acquire necessary skills, knowledge and attitude.

I acknowledge the contribution of the book development team, reviewers and all institutions and organisations, which have supported in the development of this textbook.

NCERT would welcome suggestions from students, teachers and parents, which would help us to further improve the quality of the material in subsequent editions.

New Delhi
June 2018

HRUSHIKESH SENAPATY

Director

National Council of Educational
Research and Training

ABOUT THE TEXTBOOK

A Dairy Farmer is responsible for profitably managing various activities in a dairy farm like production and marketing of milk and milk products, and maintaining the health and productivity of cattle. The person is expected to demonstrate the ability to make various strategic and operational decisions in the dairy farm. This requires clarity of processes and a result-oriented approach.

Dairy farmers are the primary producers in the milk supply chain. They add value to their product by adopting various methods of production to meet the demands of customers and processors. The textbook throws an insight into how these objectives can be achieved.

Dairy animals do not include goats as the share of goat milk in the total milk production in India is only 3–4 per cent. Therefore, this textbook focuses only on cows and buffaloes, who are the main contributors in the country's total milk produce.

The textbook is written to impart practical know-how to students desirous of making a career in the milk production business. It focuses on the relationship between consumer safety, and economic, social and environmental management at farm level. It contains guidelines and practices required to contribute to profitable dairy farming. The various practices cover key aspects of animal health—nutrition, milk hygiene and environment welfare.

The practices recommended in the textbook have been drawn from practical experiences at Nanaji Deshmukh Veterinary Science University, Jabalpur, Madhya Pradesh. The students are encouraged to select and implement guidelines relevant to their situation. Hence, the textbook aims to provide a framework for dairying schemes to be developed nationwide by providing entrepreneurs and dairy farmers with an opportunity to develop dairy farming practices specific to their needs.

The textbook has been developed with the contribution of subject and industry experts. Adequate care has been taken to align the content of the textbook with the National Occupational Standards (NOSs) for the job role of a Dairy Farmer. This will enable the students to acquire knowledge and skills as per the performance criteria mentioned in the Qualification Pack by the Agriculture Skill Council

of India. The textbook has been reviewed by an expert faculty of the Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh, to ensure that the content is not only aligned with the NOSs but is also of high quality. The NOSs for the job role of Dairy Farmer covered in the textbook are as follows.

1. AGR/N4106: Forage conservation
2. AGR/N4104: Maintaining healthy performance of livestock
3. AGR/N4105: Performing hand and machine milking
4. AGR/N9903: Maintaining health and safety standards at workplace
5. AGR/N4107: Entrepreneurship

The textbook is divided into five Units. Unit 1 talks about fodder crops, their harvesting and methods of forage conservation. Unit 2 describes the ways and means of maintaining healthy performance of livestock. The different methods of performing hand and machine milking are detailed in Unit 3. Unit 4 contains information on how to maintain the health and safety of animals in a dairy farm. Unit 5 discusses the important aspects of entrepreneurship in the dairy sector.

We hope this textbook will be useful for teachers and students, who opt for this job role. Suggestions for improving the textbook are welcome.

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The photographs used in the textbook have been selected with care and diligence for providing a better understanding to students. Care has been taken not to violate any copyright issue. The images are meant for educational purpose only and are being provided for the personal use of the students and teachers.

Gratitude is also due to the Publication Division, NCERT, for transforming the manuscript into an attractive textbook. Special thanks are due to Sweta Jha, *Editor* (contractual) and Seema Kumar, *freelance editor*, for copyediting this textbook. Pavan Kumar Barriar, *DTP Operator*, Publication Division, and Sachin Tanwar, *DTP Operator* (contractual), are appreciated for layout and design.

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